To: Copeland, Michael [Copeland. Michael @epa.gov]

From: Bahrman, Sarah

Sent: Fri 8/7/2015 7:56:43 PM

Subject: FW: FW: USGS flow data on the Animas

Sarah E. Bahrman | Acting Director, Water Program | U.S. Environmental Protection Agency - Region 8

(p) 303.312.6243 | (c) 303.903.8515 | (f) 877.876.9101

From: Ken Bousfield [mailto:kbousfield@utah.gov]

Sent: Friday, August 07, 2015 1:31 PM

To: Bahrman, Sarah

Subject: Fwd: FW: USGS flow data on the Animas

More updates.

Ken B

----- Forwarded message -----

From: Kliphuis, Trais, NMENV < trais.kliphuis@state.nm.us>

Date: Fri, Aug 7, 2015 at 12:28 PM

Subject: FW: USGS flow data on the Animas

To: Ken Bousfield kbousfield@utah.gov">kbousfield@utah.gov, Trevor Baggiore Baggiore.Trevor@azdeq.gov

Dilution estimates that may be useful or relevant to you...

From: Hogan, James, NMENV

Sent: Friday, August 07, 2015 11:30 AM

To: Yurdin, Bruce, NMENV; Kliphuis, Trais, NMENV; Majure, Allison, NMENV; Roberts, Kathryn,

NMENV; Hunter, Michelle, NMENV; McQuillan, Dennis, NMENV; Longmire, Patrick, NMENV; shuryn, danielle, NMENV; Tongate, Butch, NMENV; king, jack, NMENV; Flynn, Ryan, NMENV **Subject:** USGS flow data on the Animas

Here is what the stream flow looks like going downstream to get a sense of the size of the release and the amount of dilution

Cement Creek – is where the discharge occurred – the flow spiked at \sim 140 cfs

When it joined the Animas the flow went from ~240 cfs to ~380 cfs

Flow in Durango was ~620 cfs – it is hard to see the pulse at the gage data here

Animas at State Line – 700 cfs – apparently has not made it to the State line yet

Animas at Aztec – 800 cfs

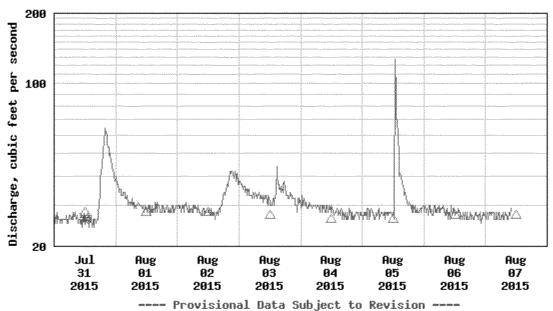
Animas at Farmington – 800 cfs

San Juan below Farmington -1500 cfs - this is below Animas so the Animas is ~ 800 cfs then the San Juan is ~ 700 cfs which is consistent with the 650 cfs release - so right now the San Juan dilution of the Animas is more or less 1:1 right now - with the increase from Navajo releasing 1300 cfs this would move to a 2:1 dilution.

Graphs of the gage data going downstream are provided below.

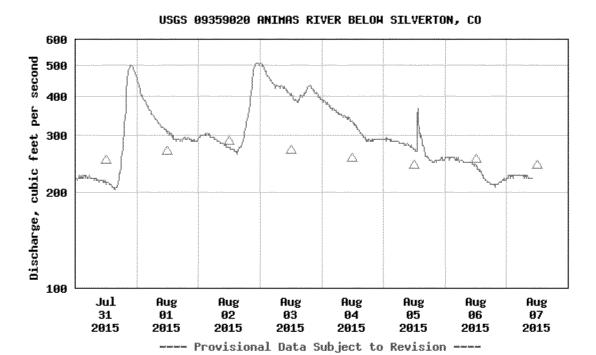
Most recent instantaneous value: 29 08-07-2015 10:00 MDT





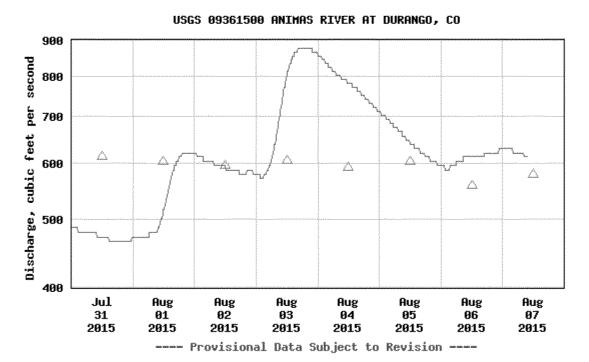
 $[\]triangle$ Median daily statistic (22 years) # Measured discharge — Discharge

Discharge, cubic feet per second
Most recent instantaneous value: 221 08-07-2015 10:00 MDT



△ Median daily statistic (23 years) — Discharge

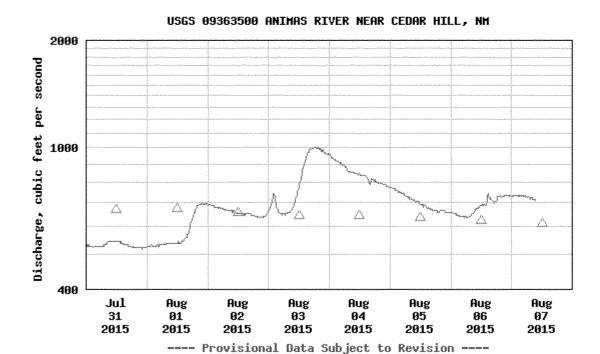
Most recent instantaneous value: 614 08-07-2015 09:30 MDT



△ Median daily statistic (103 years) — Discharge

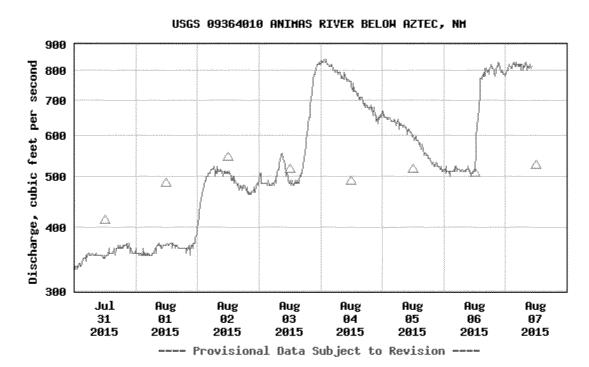
Create presentation-quality / stand-alone graph. Subscribe to @ WaterAlert

Most recent instantaneous value: 705 08-07-2015 10:30 MDT



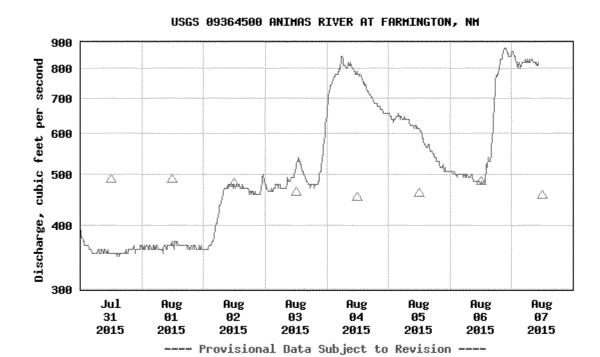
△ Median daily statistic (81 years) — Discharge

Most recent instantaneous value: 814 08-07-2015 10:15 MDT



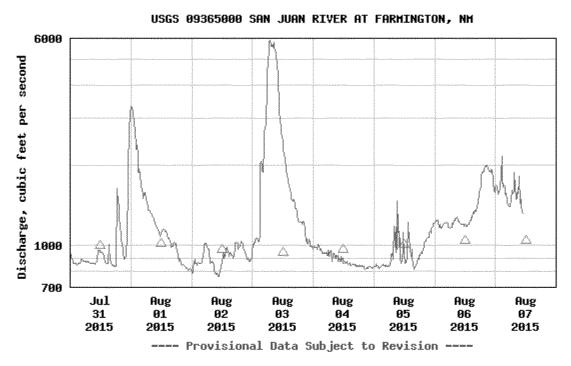
🛆 Median daily statistic (12 years) — Discharge

Most recent instantaneous value: 812 08-07-2015 10:30 MDT



🛆 Median daily statistic (91 years) —— Discharge

Most recent instantaneous value: 1,320 08-07-2015 11:00 MDT



△ Median daily statistic (84 years) — Discharge

James Hogan

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